GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: August 28, 2003, 18:21:02 ; Search time 43.2727 Seconds
(without alignments)
51.353 Million cell updates/sec

Title: US-09-743-225-9
Perfect score: 73
Sequence: 1 KDKATFGTHDGGXA 14

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 1107863

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_19Jun03:*
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2: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
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23: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*
24: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA2003.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	71	97.3	14	21	AAY69260	Monopeptide which
2	62	84.9	11	21	AAY69270	Cyclic peptide whi
3	56	76.7	12	21	AAB17993	Beta-2GPI Ab bindi
4	56	76.7	12	23	ABB73364	Exemplary pharmaco
5	56	76.7	145	16	AAR75003	Human beta-2 glyco
6	56	76.7	207	16	AAR75002	Human beta-2 glyco
7	56	76.7	248	16	AAR74999	Human beta-2 glyco
8	56	76.7	266	16	AAR75001	Human beta-2 glyco
9	56	76.7	326	16	AAR74998	Human beta-2 glyco
10	56	76.7	326	21	AAY44429	Human beta-2 glyco
11	56	76.7	345	24	ABR48505	Human Apolipoprote
12	50	68.5	10	21	AAB17992	Beta-2GPI Ab bindi
13	50	68.5	10	23	ABB73363	Exemplary pharmaco
14	44	60.3	785	21	AAY82220	Humicola insolens
15	44	60.3	785	22	AAG65578	H. insolens DSM 18
16	42	57.5	1674	20	AAY06199	Maize endosperm st
17	42	57.5	1674	21	AAB49305	Maize starch synth
18	41	56.2	95	23	ABP09333	Human ORFX protein
19	40	54.8	718	23	ABG80348	Clostridium diffic
20	40	54.8	719	22	AAG79241	Amino acid sequenc
21	40	54.8	719	23	ABG80349	Clostridium diffic
22	40	54.8	719	23	ABG80352	Clostridium diffic
23	40	54.8	719	23	ABG80353	Clostridium diffic
24	40	54.8	719	23	AAU12037	Clostridium diffic
25	39	53.4	14	22	ABB56636	Human SNP related
26	39	53.4	102	22	AAM84388	Human immune/haema
27	39	53.4	258	24	ABR48467	Human Armapoptin.
28	39	53.4	453	22	AAU28175	Novel human secret
29	39	53.4	453	22	AAG67135	Amino acid sequenc
30	39	53.4	453	22	AAG67208	Amino acid sequenc
31	39	53.4	453	22	AAM93332	Human polypeptide,
32	39	53.4	518	24	ABP77203	N. gonorrhoeae ami
33	39	53.4	664	22	AAB20000	Arabidopsis acyl-C
34	39	53.4	1039	22	ABG15145	Novel human diagno
35	38	52.1	283	21	AAY88050	C. versicolor stre
36	38	52.1	283	21	AAY88051	C. versicolor stre
37	38	52.1	480	23	AAU82978	C. albicans BFR2 p
38	38	52.1	531	23	ABP73319	Candida albicans e
39	38	52.1	794	24	ABJ25779	Aspergillus fumiga
40	38	52.1	794	24	ABJ26379	Aspergillus fumiga
41	37	50.7	114	22	AAU46546	Propionibacterium
42	37	50.7	188	23	AAU69559	Human G protein-co
43	37	50.7	295	23	ABG98037	Mutant haloalkane
44	37	50.7	537	23	ABP28881	Streptococcus poly
45	37	50.7	3636	21	AAG47201	Arabidopsis thalia

ALIGNMENTS

RESULT 1
AAY69260
ID AAY69260 standard; peptide; 14 AA.
XX
AC AAY69260;
XX
DT 30-MAY-2000 (first entry)
XX
DE Monopeptide which inhibits anti-beta-2-glycoprotein 1 antibodies.
XX
KW Anti-beta-2-glycoprotein 1 antibody; anti-B2GPI antibody;
KW anti-phospholipid syndrome; anti-phospholipid antibody;
KW pregnancy complication; thrombosis; coagulation dysregulation.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT Modified-site 13
FT /note= "FmocLys(Fmoc)-OH"
XX
PN WO200001729-A2.
XX
PD 13-JAN-2000.
XX
PF 06-JUL-1999; 99WO-IL00366.
XX
PR 07-JUL-1998; 98IL-0125262.
XX
PA (YEDA) YEDA RES & DEV CO LTD.
XX
PI Blank M, Cabilly S, Shoenfeld Y, Katchalski-Katzir E;
XX

DR WPI; 2000-182105/16.
XX
PT Novel synthetic peptides that inhibit anti-beta-2-glycoprotein 1
PT antibodies, useful for diagnosis and treatment of anti-phospholipid
PT syndrome in humans -
XX
PS Disclosure; Page 13; 58pp; English.
XX
CC The present sequence represents a synthetic peptide which is capable
CC of inhibiting the biological activity of anti-beta-2-glycoprotein 1
CC (B2GPI) monoclonal antibodies in vitro and of inhibiting in vivo
CC induction of experimental anti-phospholipid syndrome in mice by
CC anti-B2GPI monoclonal antibodies. The peptides are used for diagnosis
CC and treatment of anti-phospholipid syndrome. They may also be used
CC for the diagnosis of anti-phospholipid antibodies with different
CC pathogenic biofunctions which may correlate with either pregnancy
CC complications, thrombosis or coagulation dysregulation.
XX
SQ Sequence 14 AA;

Query Match 97.3%; Score 71; DB 21; Length 14;
Best Local Similarity 100.0%; Pred. No. 2.3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KDKATFGTHDGGXA 14
||||||||||||||
Db 1 KDKATFGTHDGGXA 14

RESULT 2
AAY69270
ID AAY69270 standard; peptide; 11 AA.
XX
AC AAY69270;
XX
DT 30-MAY-2000 (first entry)
XX
DE Cyclic peptide which inhibits anti-beta-2-glycoprotein 1 antibodies.
XX
KW Anti-beta-2-glycoprotein 1 antibody; anti-B2GPI antibody; cyclic;
KW anti-phospholipid syndrome; anti-phospholipid antibody;
KW pregnancy complication; thrombosis; coagulation dysregulation.
XX
OS Synthetic.
XX
PN WO200001729-A2.
XX
PD 13-JAN-2000.
XX
PF 06-JUL-1999; 99WO-IL00366.
XX
PR 07-JUL-1998; 98IL-0125262.
XX
PA (YEDA) YEDA RES & DEV CO LTD.
XX
PI Blank M, Cabilly S, Shoenfeld Y, Katchalski-Katzir E;
XX
DR WPI; 2000-182105/16.
XX
PT Novel synthetic peptides that inhibit anti-beta-2-glycoprotein 1
PT antibodies, useful for diagnosis and treatment of anti-phospholipid
PT syndrome in humans -
XX
PS Claim 4; Page 38; 58pp; English.
XX
CC The present sequence represents a synthetic peptide which is capable
CC of inhibiting the biological activity of anti-beta-2-glycoprotein 1
CC (B2GPI) monoclonal antibodies in vitro and of inhibiting in vivo
CC induction of experimental anti-phospholipid syndrome in mice by
CC anti-B2GPI monoclonal antibodies. The peptides are used for diagnosis
CC and treatment of anti-phospholipid syndrome. They may also be used
CC for the diagnosis of anti-phospholipid antibodies with different
CC pathogenic biofunctions which may correlate with either pregnancy
CC complications, thrombosis or coagulation dysregulation.
XX
SQ Sequence 11 AA;

Query Match 84.9%; Score 62; DB 21; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.8e-05;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 KDKATFGTHDG 11
||||||||||||
Db 1 KDKATFGTHDG 11

RESULT 3
AAB17993
ID AAB17993 standard; Peptide; 12 AA.
XX
AC AAB17993;
XX
DT 31-OCT-2000 (first entry)
XX
DE Beta-2GPI Ab binding peptide sequence SEQ ID NO:1105.
XX
KW Modified peptide; therapeutic agent; fusion; Fc domain; cancer;
KW autoimmune disease; cytostatic; antiasthmatic; thrombolytic; VEGF;
KW immunosuppressive; EPO; TPO; CTLA4; mimetic; IL-1; TNF; antagonist;
KW MMP; inhibitor; erythropoietin; thrombopoietin; interleukin 1;
KW cytotoxic T cell lymphocyte antigen 4; tumour necrosis factor;
KW vascular endothelial growth factor; matrix metalloproteinase;
KW asthma; thrombosis; pharmaceutical.
XX
OS Synthetic.
XX
PN WO200024782-A2.
XX
PD 04-MAY-2000.
XX
PF 25-OCT-1999; 99WO-US25044.
XX
PR 23-OCT-1998; 98US-0105371.
PR 22-OCT-1999; 99US-0428082.
XX
PA (AMGE-) AMGEN INC.
XX
PI Feige U, Liu C, Cheetham J, Boone TC;
XX
DR WPI; 2000-350702/30.
XX
PT Novel composition of matter comprising an Fc domain and
PT pharmacologically active peptides, useful for treating cancer and
PT autoimmune diseases -
XX
PS Claim 39; Page 600; 608pp; English.
XX
CC The present invention describes composition of matter (I) comprising an
CC Fc domain, pharmacologically active peptides, and linkers. Where (I) is:
CC (X1)a-F1-(X2)b, where: F1 = an Fc domain; X1 and X2 = are each
CC independently selected from -(L1)c-P1, -(L1)c-P1-(L2)d-P2,
CC -(L1)c-P1-(L2)d-P2-(L3)e-P^3, or -(L1)c-P1-(L2)d-P2-(L3)e-P3-(L4)f-P4
CC where P1, P2, P3, and P4 = are each independently sequences of
CC pharmacologically active peptides; L1, L2, L3, and L4 = are each
CC independently linkers; and a, b, c, d, e, and f = are each independently
CC 0 or 1, provided that at least 1 of a and b is 1. The composition can
CC have cytostatic, antiasthmatic, thrombolytic and immunosuppressive
CC activities. DNAs, vectors and host cells from the present invention can
CC be used for producing pharmaceutical compositions. The compositions are
CC useful for treating cancer, asthma, thrombosis, or autoimmune diseases.
CC The use of an Fc domain (rather than a Fab domain) can provide a longer
CC half-life or incorporate functions such as Fc receptor binding, protein
CC A binding, complement fixation, and possibly placental transfer. AAA69443
CC to AAA69526 and AAB16955 to AAB18003 represent nucleotide and amino acid
CC sequences used in the exemplification of the present invention.
XX

SQ Sequence 12 AA;

Query Match 76.7%; Score 56; DB 21; Length 12;
Best Local Similarity 90.9%; Pred. No. 0.0011;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 KDKATFGTHDG 11
||||||| |||
Db 1 KDKATFGCHDG 11

RESULT 4
ABB73364
ID ABB73364 standard; Peptide; 12 AA.
XX
AC ABB73364;
XX
DT 05-APR-2002 (first entry)
XX
DE Exemplary pharmacologically active peptide SEQ ID NO:1103.
XX
KW Modified peptide; mimetic; Fc domain; fusion; immunoglobulin G; IgG;
KW EPO; erythropoietin; TPO; tumour necrosis factor alpha inhibitor;
KW TNF-alpha inhibitor; interleukin 1 antagonist; IL-1 antagonist; TMP;
KW TPO mimetic peptide; EPO mimetic peptide; EMP; VEGF antagonist;
KW MMP inhibitor; antiinflammatory; antitumour; immunosuppressive;
KW cytostatic; antirheumatic; antiarthritic; antidiabetic; ophthalmological;
KW antianaemic; anorectic; antiinfertility; haemostatic; dermatological;
KW neuroprotective; inflammatory disease; autoimmune disease; tumour growth;
KW cancer; rheumatoid arthritis; diabetic retinopathy; infertility; obesity;
KW sleep disorder; neurological degenerative disease; anaemia;
KW thrombocytopaenia; metastatic tumour; systemic lupus erythematosus;
KW Fanconi's syndrome.
XX
OS Synthetic.
XX
PN WO200183525-A2.
XX
PD 08-NOV-2001.
XX
PF 02-MAY-2001; 2001WO-US14310.
XX
PR 03-MAY-2000; 2000US-0563286.
XX
PA (AMGE-) AMGEN INC.
XX
PI Feige U, Liu C, Cheetham JC, Boone TC, Gudas JM;
XX
DR WPI; 2002-130313/17.
XX
PT Novel vehicle-peptide molecule or its multimers useful for treating
PT inflammatory and autoimmune diseases, cancer, rheumatoid arthritis,
PT diabetic retinopathy, obesity, sleep disorders and infertility -
XX
PS Claim 39; Page 62; 176pp; English.
XX
CC The present invention describes a vehicle-peptide molecule (I) or its
CC multimers. (I) can have antiinflammatory, antitumour, immunosuppressive,
CC cytostatic, antirheumatic, antiarthritic, antidiabetic, ophthalmological,
CC antianaemic, anorectic, antiinfertility, haemostatic, dermatological and
CC neuroprotective activities. (I) can be used as a therapeutic or
CC prophylactic agent as well as for screening purposes. (I) is useful for
CC diagnosing diseases characterised by dysfunction of their associated
CC protein of interest, for identifying normal or abnormal proteins of
CC interest, as a part of diagnostic kit to detect the presence of their
CC proteins of interest in a biological sample. Additionally, (I) is useful
CC for treating inflammatory and autoimmune diseases, tumour growth, cancer,
CC rheumatoid arthritis, diabetic retinopathy, obesity, sleep disorders,
CC infertility, and neurological degenerative diseases. (I), comprising
CC EPO-mimetic compounds are useful for treating disorders characterised by
CC low red blood cell levels such as anaemia. The TPO-mimetic comprising
CC compounds are useful for treating conditions that involve an existing
CC megakaryocyte/platelet deficiency or an expected megakaryocyte/platelet
CC deficiency, such as thrombocytopaenia, aplastic anaemia, metastatic
CC tumour which result in thrombocytopaenia, systemic lupus erythematosus,
CC and Fanconi's syndrome. ABB72403 to ABB73426 and ABL35695 to ABL35777
CC represent amino acid and nucleic acid sequences used in the
CC exemplification of the present invention.
XX
SQ Sequence 12 AA;

Query Match 76.7%; Score 56; DB 23; Length 12;
Best Local Similarity 90.9%; Pred. No. 0.0011;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 KDKATFGTHDG 11
||||||| |||
Db 1 KDKATFGCHDG 11

RESULT 5
AAR75003
ID AAR75003 standard; protein; 145 AA.
XX
AC AAR75003;
XX
DT 18-JAN-1996 (first entry)
XX
DE Human beta-2 glycoprotien domains IV-V.
XX
KW Human beta-2 glycoprotein; domains IV-V; antiphospholipid antibodies;
KW reagent; assay; diagnosis; autoimmune; infectious diseases.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Disulfide-bond 5..48
FT Disulfide-bond 34..60
FT Disulfide-bond 64..115
FT Disulfide-bond 100..125
FT Disulfide-bond 107..145
XX
PN WO9514231-A1.
XX
PD 26-MAY-1995.
XX
PF 15-NOV-1994; 94WO-JP01929.
XX
PR 16-NOV-1993; 93JP-0309874.
XX
PA (YAMA-) YAMASA CORP.
XX
PI Igarashi M, Igarashi Y, Koike T, Matsuura E, Nagae H;
XX
DR WPI; 1995-200487/26.
XX
PT Assay and typing of anti:phospholipid antibodies - using peptide
PT containing the IV domain of beta-2 glyco:protein
XX
PS Example; Fig 6; 70pp; Japanese.
XX
CC AAR75003 is the human beta-2 glycoprotein domains IV-V, it can be
CC used as a reagent (pref. immobilised on a suitable carrier) in
CC an immunoassay for antiphospholipid antibodies in biological
CC samples. The assay allows the rapid and accurate diagnosis of
CC syndromes involving antiphospholipid antibodies, and can
CC discriminate between autoimmune and infectious diseases.
XX
SQ Sequence 145 AA;

Query Match 76.7%; Score 56; DB 16; Length 145;
Best Local Similarity 90.9%; Pred. No. 0.02;
Matches 10; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 KDKATFGTHDG 11
||||||| |||

```
Db         27 KDKATFGCHDG 37


RESULT 6
AAR75002
ID   AAR75002 standard; protein; 207 AA.
XX
AC   AAR75002;
XX
DT   18-JAN-1996  (first entry)
XX
DE   Human beta-2 glycoprotien domains III-V.
XX
KW   Human beta-2 glycoprotein; domains III-V; antiphospholipid antibodies;
KW   reagent; assay; diagnosis; autoimmune; infectious diseases.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  4..50
FT   Disulfide-bond  36..62
FT   Disulfide-bond  67..110
FT   Disulfide-bond  96..122
FT   Disulfide-bond  126..177
FT   Disulfide-bond  162..187
FT   Disulfide-bond  169..207
XX
PN   WO9514231-A1.
XX
PD   26-MAY-1995.
XX
PF   15-NOV-1994;   94WO-JP01929.
XX
PR   16-NOV-1993;   93JP-0309874.
XX
PA   (YAMA-) YAMASA CORP.
XX
PI   Igarashi M,  Igarashi Y,  Koike T,  Matsuura E,  Nagae H;
XX
DR   WPI; 1995-200487/26.
XX
PT   Assay and typing of anti:phospholipid antibodies - using peptide
PT   containing the IV domain of beta-2 glyco:protein
XX
PS   Example; Fig 5; 70pp; Japanese.
XX
CC   AAR75002 is the human beta-2 glycoprotein domains III-V, it can be
CC   used as a reagent (pref. immobilised on a suitable carrier) in
CC   an immunoassay for antiphospholipid antibodies in biological
CC   samples. The assay allows the rapid and accurate diagnosis of
CC   syndromes involving antiphospholipid antibodies, and can
CC   discriminate between autoimmune and infectious diseases.
XX
SQ   Sequence   207 AA;

  Query Match             76.7%;  Score 56;  DB 16;  Length 207;
  Best Local Similarity   90.9%;  Pred. No. 0.031;
  Matches   10;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KDKATFGTHDG 11
              ||||||| |||
Db         89 KDKATFGCHDG 99


RESULT 7
AAR74999
ID   AAR74999 standard; protein; 248 AA.
XX
AC   AAR74999;
XX
DT   18-JAN-1996  (first entry)
XX
DE   Human beta-2 glycoprotien domains I-IV.
XX
KW   Human beta-2 glycoprotein; domains I-IV; antiphospholipid antibodies;
KW   reagent; assay; diagnosis; autoimmune; infectious diseases.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  4..47
FT   Disulfide-bond  32..60
FT   Disulfide-bond  65..105
FT   Disulfide-bond  91..118
FT   Disulfide-bond  123..169
FT   Disulfide-bond  155..181
FT   Disulfide-bond  186..229
FT   Disulfide-bond  215..241
XX
PN   WO9514231-A1.
XX
PD   26-MAY-1995.
XX
PF   15-NOV-1994;   94WO-JP01929.
XX
PR   16-NOV-1993;   93JP-0309874.
XX
PA   (YAMA-) YAMASA CORP.
XX
PI   Igarashi M,  Igarashi Y,  Koike T,  Matsuura E,  Nagae H;
XX
DR   WPI; 1995-200487/26.
XX
PT   Assay and typing of anti:phospholipid antibodies - using peptide
PT   containing the IV domain of beta-2 glyco:protein
XX
PS   Example; Fig 2; 70pp; Japanese.
XX
CC   AAR74999 is the human beta-2 glycoprotein domains I-IV, it can be
CC   used as a reagent (pref. immobilised on a suitable carrier) in
CC   an immunoassay for antiphospholipid antibodies in biological
CC   samples. The assay allows the rapid and accurate diagnosis of
CC   syndromes involving antiphospholipid antibodies, and can
CC   discriminate between autoimmune and infectious diseases.
XX
SQ   Sequence   248 AA;

  Query Match             76.7%;  Score 56;  DB 16;  Length 248;
  Best Local Similarity   90.9%;  Pred. No. 0.038;
  Matches   10;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KDKATFGTHDG 11
              ||||||| |||
Db        208 KDKATFGCHDG 218


RESULT 8
AAR75001
ID   AAR75001 standard; protein; 266 AA.
XX
AC   AAR75001;
XX
DT   18-JAN-1996  (first entry)
XX
DE   Human beta-2 glycoprotien domains II-V.
XX
KW   Human beta-2 glycoprotein; domains II-V; antiphospholipid antibodies;
KW   reagent; assay; diagnosis; autoimmune; infectious diseases.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  5..45
FT   Disulfide-bond  31..58
FT   Disulfide-bond  63..109
FT   Disulfide-bond  95..121
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```
FT   Disulfide-bond  126..169
FT   Disulfide-bond  155..181
FT   Disulfide-bond  185..236
FT   Disulfide-bond  221..246
FT   Disulfide-bond  228..266
XX
PN   WO9514231-A1.
XX
PD   26-MAY-1995.
XX
PF   15-NOV-1994;   94WO-JP01929.
XX
PR   16-NOV-1993;   93JP-0309874.
XX
PA   (YAMA-) YAMASA CORP.
XX
PI   Igarashi M,  Igarashi Y,  Koike T,  Matsuura E,  Nagae H;
XX
DR   WPI; 1995-200487/26.
XX
PT   Assay and typing of anti:phospholipid antibodies - using peptide
PT   containing the IV domain of beta-2 glyco:protein
XX
PS   Example; Fig 4; 70pp; Japanese.
XX
CC   AAR75001 is the human beta-2 glycoprotein domains II-V, it can be
CC   used as a reagent (pref. immobilised on a suitable carrier) in
CC   an immunoassay for antiphospholipid antibodies in biological
CC   samples. The assay allows the rapid and accurate diagnosis of
CC   syndromes involving antiphospholipid antibodies, and can
CC   discriminate between autoimmune and infectious diseases.
XX
SQ   Sequence   266 AA;

  Query Match             76.7%;  Score 56;  DB 16;  Length 266;
  Best Local Similarity   90.9%;  Pred. No. 0.041;
  Matches   10;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KDKATFGTHDG 11
              ||||||| |||
Db        148 KDKATFGCHDG 158


RESULT 9
AAR74998
ID   AAR74998 standard; protein; 326 AA.
XX
AC   AAR74998;
XX
DT   18-JAN-1996  (first entry)
XX
DE   Human beta-2 glycoprotien domains I-V.
XX
KW   Human beta-2 glycoprotein; domains I-V; antiphospholipid antibodies;
KW   reagent; assay; diagnosis; autoimmune; infectious diseases.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Disulfide-bond  4..47
FT   Disulfide-bond  32..60
FT   Disulfide-bond  65..105
FT   Disulfide-bond  91..118
FT   Disulfide-bond  123..169
FT   Disulfide-bond  155..181
FT   Disulfide-bond  186..229
FT   Disulfide-bond  215..241
FT   Disulfide-bond  245..296
FT   Disulfide-bond  281..306
FT   Disulfide-bond  288..326
XX
PN   WO9514231-A1.
XX
PD   26-MAY-1995.
XX
PF   15-NOV-1994;   94WO-JP01929.
XX
PR   16-NOV-1993;   93JP-0309874.
XX
PA   (YAMA-) YAMASA CORP.
XX
PI   Igarashi M,  Igarashi Y,  Koike T,  Matsuura E,  Nagae H;
XX
DR   WPI; 1995-200487/26.
XX
PT   Assay and typing of anti:phospholipid antibodies - using peptide
PT   containing the IV domain of beta-2 glyco:protein
XX
PS   Example; Fig 1; 70pp; Japanese.
XX
CC   AAR74998 is the human beta-2 glycoprotein domains I-V, it can be
CC   used as a reagent (pref. immobilised on a suitable carrier) in
CC   an immunoassay for antiphospholipid antibodies in biological
CC   samples. The assay allows the rapid and accurate diagnosis of
CC   syndromes involving antiphospholipid antibodies, and can
CC   discriminate between autoimmune and infectious diseases.
XX
SQ   Sequence   326 AA;

  Query Match             76.7%;  Score 56;  DB 16;  Length 326;
  Best Local Similarity   90.9%;  Pred. No. 0.052;
  Matches   10;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KDKATFGTHDG 11
              ||||||| |||
Db        208 KDKATFGCHDG 218


RESULT 10
AAY44429
ID   AAY44429 standard; Protein; 326 AA.
XX
AC   AAY44429;
XX
DT   22-MAR-2000  (first entry)
XX
DE   Human beta-2 glycoprotein I.
XX
KW   Human beta-2 glycoprotein I; beta-2 GPI; toleragen; B cell anergy;
KW   beta-2 GPI-dependent antiphospholipid antibody; thrombosis;
KW   recurrent foetal loss; thrombocytopenia; autoimmune disease;
KW   systemic lupus erythematosus; coagulation assay.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Domain          1..64
FT                   /label= Domain_1
FT                   /note= "binds to antiphospholipid antibody"
XX
PN   WO9964595-A1.
XX
PD   16-DEC-1999.
XX
PF   09-JUN-1999;   99WO-US13194.
XX
PR   09-JUN-1998;   98US-0088656.
PR   05-OCT-1998;   98US-0103088.
PR   08-JUN-1999;   99US-0328199.
XX
PA   (LJOL-) LA JOLLA PHARM CO.
XX
PI   Marquis DM,  Iverson GM,  Victoria EJ,  Jones DS,  Linnik MD;
XX
DR   WPI; 2000-116542/10.
DR   N-PSDB; AAZ29687.
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```
XX
PT   New isolated domain 1 beta-2 GPI polypeptides, used for inhibiting
PT   antiphospholipid antibodies for treating, e.g. thrombosis -
XX
PS   Claim 1; Fig 1; 158pp; English.
XX
CC   The present sequence is human beta-2 glycoprotein, a phospholipid binding
CC   serum protein. GPI proteins bind to and inhibits beta-2 GPI-dependent
CC   antiphospholipid antibodies. They are useful as toleragens when they bind
CC   to the antibodies at the surface of a B cell and triggers B cell anergy.
CC   The polypeptides and mimetics can be used for treating disorders
CC   associated with beta_2GPI-dependent aPL-associated pathologies, e.g.
CC   thrombosis, recurrent foetal loss, thrombocytopenia or autoimmune
CC   diseases such as systemic lupus erythematosus. The polypeptides can also
CC   be used to detect and purify antibodies. They can also be used in
CC   coagulation assays.
XX
SQ   Sequence   326 AA;

  Query Match             76.7%;  Score 56;  DB 21;  Length 326;
  Best Local Similarity   90.9%;  Pred. No. 0.052;
  Matches   10;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KDKATFGTHDG 11
              ||||||| |||
Db        208 KDKATFGCHDG 218


RESULT 11
ABR48505
ID   ABR48505 standard; Protein; 345 AA.
XX
AC   ABR48505;
XX
DT   13-JUN-2003  (first entry)
XX
DE   Human Apolipoprotein H, NAPOH.
XX
KW   Human; GENSET; therapeutic; therapy.
XX
OS   Homo sapiens.
XX
PN   WO200294864-A2.
XX
PD   28-NOV-2002.
XX
PF   06-AUG-2001; 2001WO-IB01715.
XX
PR   25-MAY-2001; 2001US-293574P.
PR   15-JUN-2001; 2001US-298698P.
PR   29-JUN-2001; 2001US-302277P.
PR   13-JUL-2001; 2001US-305456P.
XX
PA   (GEST ) GENSET.
XX
PI   Bejanin S,  Tanaka H;
XX
DR   WPI; 2003-129412/12.
DR   N-PSDB; ACC51112.
XX
PT   New GENSET polynucleotides and polypeptides, useful for preparing a
PT   composition for treating GENSET-related disorders and as reagents in
PT   assays to quantitatively determined levels of GENSET expression in
PT   biological samples -
XX
PS   Claim 2; Page 496-497; 505pp; English.
XX
CC   The present invention relates to novel human GENSET coding sequences
CC   (ACC51060-ACC51115) and proteins (ABR48453-ABR48508). The GENSET
CC   sequences are useful for preparing a composition for treating
CC   GENSET-related disorders. They can also be used as markers for tissues in
CC   which the corresponding protein is preferentially expressed, as molecular
CC   weight markers on Southern gels, as chromosome markers or tags to
CC   identify chromosomes, and as reagents in assays to quantitatively
CC   determined levels of GENSET expression in biological samples.
XX
SQ   Sequence   345 AA;

  Query Match             76.7%;  Score 56;  DB 24;  Length 345;
  Best Local Similarity   90.9%;  Pred. No. 0.056;
  Matches   10;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 KDKATFGTHDG 11
              ||||||| |||
Db        227 KDKATFGCHDG 237


RESULT 12
AAB17992
ID   AAB17992 standard; Peptide; 10 AA.
XX
AC   AAB17992;
XX
DT   31-OCT-2000  (first entry)
XX
DE   Beta-2GPI Ab binding peptide sequence SEQ ID NO:1104.
XX
KW   Modified peptide; therapeutic agent; fusion; Fc domain; cancer;
KW   autoimmune disease; cytostatic; antiasthmatic; thrombolytic; VEGF;
KW   immunosuppressive; EPO; TPO; CTLA4; mimetic; IL-1; TNF; antagonist;
KW   MMP; inhibitor; erythropoietin; thrombopoietin; interleukin 1;
KW   cytotoxic T cell lymphocyte antigen 4; tumour necrosis factor;
KW   vascular endothelial growth factor; matrix metalloproteinase;
KW   asthma; thrombosis; pharmaceutical.
XX
OS   Synthetic.
XX
PN   WO200024782-A2.
XX
PD   04-MAY-2000.
XX
PF   25-OCT-1999;   99WO-US25044.
XX
PR   23-OCT-1998;   98US-0105371.
PR   22-OCT-1999;   99US-0428082.
XX
PA   (AMGE-) AMGEN INC.
XX
PI   Feige U,  Liu C,  Cheetham J,  Boone TC;
XX
DR   WPI; 2000-350702/30.
XX
PT   Novel composition of matter comprising an Fc domain and
PT   pharmacologically active peptides, useful for treating cancer and
PT   autoimmune diseases -
XX
PS   Claim 39; Page 600; 608pp; English.
XX
CC   The present invention describes composition of matter (I) comprising an
CC   Fc domain, pharmacologically active peptides, and linkers. Where (I) is:
CC   (X1)a-F1-(X2)b,  where: F1 = an Fc domain; X1 and X2 = are each
CC   independently selected from -(L1)c-P1, -(L1)c-P1-(L2)d-P2,
CC   -(L1)c-P1-(L2)d-P2-(L3)e-P^3, or -(L1)c-P1-(L2)d-P2-(L3)e-P3-(L4)f-P4
CC   where P1, P2, P3, and P4 = are each independently sequences of
CC   pharmacologically active peptides; L1, L2, L3, and L4 = are each
CC   independently linkers; and a, b, c, d, e, and f = are each independently
CC   0 or 1, provided that at least 1 of a and b is 1. The composition can
CC   have cytostatic, antiasthmatic, thrombolytic and immunosuppressive
CC   activities. DNAs, vectors and host cells from the present invention can
CC   be used for producing pharmaceutical compositions. The compositions are
CC   useful for treating cancer, asthma, thrombosis, or autoimmune diseases.
CC   The use of an Fc domain (rather than a Fab domain) can provide a longer
CC   half-life or incorporate functions such as Fc receptor binding, protein
CC   A binding, complement fixation, and possibly placental transfer. AAA69443
CC   to AAA69526 and AAB16955 to AAB18003 represent nucleotide and amino acid
CC   sequences used in the exemplification of the present invention.
```

XX
SQ Sequence 10 AA;

Query Match 68.5%; Score 50; DB 21; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 KDKATFGTHD 10
||||||| ||
Db 1 KDKATFGCHD 10

RESULT 13
ABB73363
ID ABB73363 standard; Peptide; 10 AA.
XX
AC ABB73363;
XX
DT 05-APR-2002 (first entry)
XX
DE Exemplary pharmacologically active peptide SEQ ID NO:1102.
XX
KW Modified peptide; mimetic; Fc domain; fusion; immunoglobulin G; IgG;
KW EPO; erythropoietin; TPO; tumour necrosis factor alpha inhibitor;
KW TNF-alpha inhibitor; interleukin 1 antagonist; IL-1 antagonist; TMP;
KW TPO mimetic peptide; EPO mimetic peptide; EMP; VEGF antagonist;
KW MMP inhibitor; antiinflammatory; antitumour; immunosuppressive;
KW cytostatic; antirheumatic; antiarthritic; antidiabetic; ophthalmological;
KW antianaemic; anorectic; antiinfertility; haemostatic; dermatological;
KW neuroprotective; inflammatory disease; autoimmune disease; tumour growth;
KW cancer; rheumatoid arthritis; diabetic retinopathy; infertility; obesity;
KW sleep disorder; neurological degenerative disease; anaemia;
KW thrombocytopaenia; metastatic tumour; systemic lupus erythematosus;
KW Fanconi's syndrome.
XX
OS Synthetic.
XX
PN WO200183525-A2.
XX
PD 08-NOV-2001.
XX
PF 02-MAY-2001; 2001WO-US14310.
XX
PR 03-MAY-2000; 2000US-0563286.
XX
PA (AMGE-) AMGEN INC.
XX
PI Feige U, Liu C, Cheetham JC, Boone TC, Gudas JM;
XX
DR WPI; 2002-130313/17.
XX
PT Novel vehicle-peptide molecule or its multimers useful for treating
PT inflammatory and autoimmune diseases, cancer, rheumatoid arthritis,
PT diabetic retinopathy, obesity, sleep disorders and infertility -
XX
PS Claim 39; Page 62; 176pp; English.
XX
CC The present invention describes a vehicle-peptide molecule (I) or its
CC multimers. (I) can have antiinflammatory, antitumour, immunosuppressive,
CC cytostatic, antirheumatic, antiarthritic, antidiabetic, ophthalmological,
CC antianaemic, anorectic, antiinfertility, haemostatic, dermatological and
CC neuroprotective activities. (I) can be used as a therapeutic or
CC prophylactic agent as well as for screening purposes. (I) is useful for
CC diagnosing diseases characterised by dysfunction of their associated
CC protein of interest, for identifying normal or abnormal proteins of
CC interest, as a part of diagnostic kit to detect the presence of their
CC proteins of interest in a biological sample. Additionally, (I) is useful
CC for treating inflammatory and autoimmune diseases, tumour growth, cancer,
CC rheumatoid arthritis, diabetic retinopathy, obesity, sleep disorders,
CC infertility, and neurological degenerative diseases. (I), comprising
CC EPO-mimetic compounds are useful for treating disorders characterised by
CC low red blood cell levels such as anaemia. The TPO-mimetic comprising
CC compounds are useful for treating conditions that involve an existing
CC megakaryocyte/platelet deficiency or an expected megakaryocyte/platelet
CC deficiency, such as thrombocytopaenia, aplastic anaemia, metastatic
CC tumour which result in thrombocytopaenia, systemic lupus erythematosus,
CC and Fanconi's syndrome. ABB72403 to ABB73426 and ABL35695 to ABL35777
CC represent amino acid and nucleic acid sequences used in the
CC exemplification of the present invention.
XX
SQ Sequence 10 AA;

Query Match 68.5%; Score 50; DB 23; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 KDKATFGTHD 10
||||||| ||
Db 1 KDKATFGCHD 10

RESULT 14
AAY82220
ID AAY82220 standard; Protein; 785 AA.
XX
AC AAY82220;
XX
DT 12-JUN-2000 (first entry)
XX
DE Humicola insolens cellobiose dehydrogenase SEQ ID NO:2.
XX
KW Humicola insolens; cellobiose dehydrogenase; pulp bleaching process.
XX
OS Humicola insolens.
XX
PN US6033891-A.
XX
PD 07-MAR-2000.
XX
PF 09-MAR-1999; 99US-0265108.
XX
PR 09-MAR-1999; 99US-0265108.
XX
PA (NOVO) NOVO NORDISK BIOTECH INC.
XX
PI Golightly E, Brown K;
XX
DR WPI; 2000-255698/22.
DR N-PSDB; AAZ95701.
XX
PT New cellobiose dehydrogenase polynucleotides and polypeptides used for
PT modulation of cellobiose dehydrogenase activity -
XX
PS Claim 1; Fig 3; 28pp; English.
XX
CC The present sequence represents cellobiose dehydrogenase isolated from
CC Humicola insolens. The cellobiose dehydrogenase polynucleotides may be
CC used for recombinant production of the polypeptide. They may also be
CC used to produce transgenic plants, e.g. monocots such as grasses,
CC cereals and maize, and dicots such as tobacco, legumes, potato, sugar
CC beet. A cellobiose dehydrogenase polypeptide deleted cell may also be
CC produced, which is used for production enzymes and other heterologous
CC proteins of pharmaceutical interest, such as hormones and growth
CC factors. The cellobiose dehydrogenase polypeptide may be used in a pulp
CC bleaching process under alkaline conditions.
XX
SQ Sequence 785 AA;

Query Match 60.3%; Score 44; DB 21; Length 785;
Best Local Similarity 72.7%; Pred. No. 24;
Matches 8; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 DKATFGTHDGG 12
| |||| || |
Db 188 DTATFGFHDNG 198

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RESULT 15
AAG65578
ID   AAG65578 standard; Protein; 785 AA.
XX
AC   AAG65578;
XX
DT   07-JAN-2002  (first entry)
XX
DE   H. insolens DSM 1800 cellobiose dehydrogenase polypeptide.
XX
KW   Cellobiose dehydrogenase; transgenic; pulp bleaching; cellobiose;
KW   pharmaceutical.
XX
OS   Humicola insolens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..21
FT                   /note= "signal peptide"
FT   Protein         22
FT                   /note= "mature protein"
XX
PN   US6280976-B1.
XX
PD   28-AUG-2001.
XX
PF   05-JAN-2000; 2000US-0479264.
XX
PR   09-MAR-1999;   99US-0265108.
XX
PA   (NOVO ) NOVOZYMES BIOTECH INC.
XX
PI   Golightly EJ,  Brown KM;
XX
DR   WPI; 2001-601400/68.
DR   N-PSDB; AAH47743.
XX
PT   Novel nucleic acid encoding polypeptides with cellobiose dehydrogenase
PT   activity useful for transgenic plant production -
XX
PS   Example 2; Fig 3A-C; 27pp; English.
XX
CC   The invention relates to nucleic acids encoding polypeptides having
CC   cellobiose dehydrogenase activity. Nucleic acid construct the comprising
CC   the polynucleotides are useful in transgenic plant production. The
CC   encoded protein is useful in pulp bleaching process under alkaline
CC   conditions. Plants grown where cellobiose activity has been removed may
CC   be used to express heterologous proteins of pharmaceutical interest such
CC   as hormones, growth factors and receptors. The present sequence
CC   represents a H. insolens DSM 1800 cellobiose dehydrogenase polypeptide.
XX
SQ   Sequence   785 AA;

  Query Match             60.3%;  Score 44;  DB 22;  Length 785;
  Best Local Similarity   72.7%;  Pred. No. 24;
  Matches    8;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          2 DKATFGTHDGG 12
              | |||| || |
Db        188 DTATFGFHDNG 198


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